

MULTIPLEXER CONFIGURATION  
FOR PROGRAMMABLE LOGIC DEVICE

Abstract of the Disclosure

[0044] A multiplexer is configured on a programmable  
5 logic device using a plurality of four-input look-up  
tables chained together. The required number of look-up  
tables is about one-half the number of inputs of the  
multiplexer. For an even number of inputs, the number of  
look-up tables preferably is exactly one-half the number  
10 of inputs, while for an odd number of inputs, the number  
of look-up tables preferably is one-half the number of  
inputs, plus one-half. The number of control inputs  
preferably is one more than the number of look-up tables.  
Preferably, for any one input being a given logic state,  
15 and further selected by the one extra input (beyond the  
number of look-up tables), any particular output may be  
asserted.